1991 CONFERENCE AGENDA

CELLULAR AND MOLECULAR GENETICS

I. CELL SURFACE RECEPTORS AND SIGNAL TRANSDUCTION July 8 Morning

This session will focus on recent developments in our understanding of the structure of cell surface receptors and the molecular cascades which allow signals from the cell surface to ultimately affect nuclear events. The emphasis will be on molecular and genetic dissection of individual components of signal transduction pathways and how aberrant molecules in the pathways may be oncogenic.

Chair: Thomas Roberts
Speakers:
Mel Simon
Chuck Stiles
Tom Parsons

II. STEROID RECEPTORS AND INDUCIBLE TRANSCRIPTION FACTORS July 8 Evening

Many transcriptional control mechanisms are responsive to hormonal and mitogenic signals. In this session we will consider recent discoveries in how steroid hormone receptors, nuclear oncogenes and other transcription factors modulate transcription in direct response to such signals and the cross-talk between these regulatory pathways. The unique regulatory features of NF-kb will also be presented.

Chair: Inder Verma
Speakers:
Arnold Berk
Mark Groudine
Ron Evans

III. TRANSCRIPTIONAL CONTROLS IN CELL DETERMINATION AND LINEAGE DEVELOPMENT July 9 Morning

Transcriptional regulation is critical for many steps of determination and lineage development in a variety of eukaryotic organisms. In this session the structure, regulation and mechanism of action of key transcription proteins involved processes including segmentation, neural development and hematopoiesis will be presented.

Chair: Kathryn Calame
Speakers:
Mike Levine
Geoffrey Rosenfeld
Beverly Emerson

Source: https://www.industrydocuments.ucsf.edu/docs/lhyv0000

IV. MOLECULAR APPROACHES TO MOUSE DEVELOPMENT July 9 Evening

This session will consider several recent advances which are allowing a more detailed understanding of molecular events in mouse development to emerge. We will focus on insertional mutations in transgenic animals and the consequences of disrupting normal genes in whole animals.

Chair: Elizabeth Robertson
Proposed Speakers:
Luis Parada
(Phil Soriano)*
(Allan Bradley)

V. TRANSGENIC MICE July 10 Morning

Transgenic mice are providing excellent animal models for many human diseases including immunological defects and cancer. This session will focus on recent insights gained using such mice and will also explore recent advances using transgenic animals to study gene function and regulation.

Chair: Anton Berns
Speakers:
Rudolf Jaenisch
Rudi Grosshedl
Brian Gavin

VI. HUMAN SEX CHROMOSOMES AND SEX DETERMINATION July 10 Evening

Increasing numbers of genes are being mapped and cloned from the human X and Y chromosomes. This session will explore the new insights these studies have afforded into the mechanisms of X chromosome inactivation, recombination between X and Y chromosomes and sex determination.

Chair: Larry Shapiro
Speakers:
(Peter Goodfellow)
(D.C. Paige)
(Chris Lau)

VII. MOLECULAR GENETICS OF HUMAN DISEASES July 11 Morning

This session will focus on recent advances in studying the human genome including pedigree analysis to link disease occurrence with known markers as well as molecular cloning and analysis of the genes involved in diseases such as cystic fibrosis and neurofibromatosis.

Source: https://www.industrydocuments.ucsf.edu/docs/lhyv0000

Chair: David Housman
Speakers:
(Ray White)
(Uta Franke)

VIII. EMERGING TECHNIQUES FOR MAMMALIAN MOLECULAR GENETICS July 11 Afternoon

Diverse new technologies are becoming available which allow detailed cytological mapping of genes, molecular mapping of long chromosomal segments, cloning and sequencing of large stretches of DNA, disruption of genes by homologous recombination and gene replacement therapies. This session will allow meeting participants to become familiar with these important emerging technologies.

Chair: David Ward
Speakers:
(Mario Capecchi)
(Frank Costantini)
(Nancy Hopkins)

IX. RECESSIVE ONCOGENES OR TUMOR SUPPRESSORS July 12 Morning

There has been an explosive increase in our recent understanding of the fascinating proteins which appear to directly control the ability of cells to cycle and their involvement in suppressing cell transformation. This session will focus on important developments in this field including the effect of these proteins on malignant cells.

Chair: David Livingston

Speakers: Stephen Friend
Joan Massague
Forrest Spencer

*Speakers in parentheses are tentative.

Source: https://www.industrydocuments.ucsf.edu/docs/lhyv0000